large (13-18) and extremely large effects (19-30). Severity of disease was measured using the Nottingham Eczema Severity scores (NESS). **RESULTS:** The average QOL scores reported were 15.0±6.69 among infants (IDQOL); 16.4±7.25 among children (CDLQI), and 15.5±7.59 among families (DFI). The mean IDQOL, CDLQI and DFI scores were higher in patients with severe AD (16.7±6.66, 18.4±6.99, and 17.5±7.53, respectively) than among those with moderate AD (13.9±6.49, 15.2±7.14, and 14.2±7.35, respectively). A large proportion of respondents experienced extremely large effect of QOL scores (scoring 19 to 30), including 35.6% of infants, 44.0% of children and 39.1% of families. There were also large differences between the reported QOL from different countries. **CONCLUSIONS:** The study found that moderate to severe AD affected the QOL of the majority of patients and their families among respondents in the countries surveyed.

PRS48

IMPACT OF SEVERE AND VERY SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) ON HEALTH-RELATED QUALITY OF LIFE (HRQOL) AND WORK PRODUCTIVITY: RESULTS OF A NATIONALLY REPRESENTATIVE PATIENT SURVEY AND CHART REVIEW OF RECENTLY EXACERBATING PATIENTS

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BACKGROUND: Understanding COPD exacerbation-associated burden, particularly in severe (SEV) and very severe (VSEV) patients, can help improve medication management. **OBJECTIVES**: To describe exacerbation frequency, treatment, work productivity, and health-related quality of life (HRQoL) for patients with SEV/VSEV COPD who recently experienced a moderate (MOD)/SEV exacerbation. **METHODS**: A nationally representative sample of SEV/VSEV COPD patients who had experienced a MOD/SEV exacerbation within the past 3 months was physician recruited. Medical charts were evaluated for patient demographic/clinical data, including exacerbation frequency in the previous 12 months, work productivity and impairment (WPAI), and HRQoL (St. George's Respiratory Questionnaire for COPD, SGRQ-C). **RESULTS**: This study included 314 patients (190 SEV/124 VSEV). VSEV (vs. SEV) patients were more likely to be Caucasian (93.5% versus 82.1%, *P*=0.004) and had SEV last exacerbation (44.3% vs. 29.5%, *P*=0.016). These 314 patients experienced 829 exacerbations in the previous 12 months, of which 556 were MOD (17.2% treated with antibiotics only; 70.7% with steroids and antibiotics; 12.1% with steroids only), and 273 were SEV (19.6% treated in the ER; 53.7% hospitalized with an ER visit; 26.7% hospitalized without ER visit). 15.9% of patients (SEV 19.5%/VSEV 10.5%, *P*=0.033) were employed but reported a high percentage of overall work impairment (42.4%±31.1%) due to absenteeism/presenteeism. Activity impairment was 58.7%±28.0% across all patients. SGRQ-C scores (0-100=best-worst health) were: Total 64.7±20.4, Symptoms 70.6±19.0, Activities 78.0±21.9, and Impacts 54.7±24.8, with total scores being significantly worse for VSEV (vs. SEV COPD; 70.1±21.3 vs. 61.1±19.0; P<0.001) and SEV last exacerbation (vs. MOD; 70.3±19.9 vs. 61.7±20.1; P<0.001). **CONCLUSIONS**: MOD/SEV exacerbations in SEV/VSEV COPD patients impaired patients' work productivity and were associated with poor HRQoL. Since patients with a recent MOD/SEV exacerbation were highly likely to have experienced mild/MOD/SEV exacerbations in the previous year, interventions to further reduce exacerbations will likely have a strong impact on patient HRQoL.

RESPIRATORY-RELATED DISORDERS – Health Care Use & Policy Studies

PRS49

MULTICOMPONENT HOME-BASED ENVIRONMENTAL INTERVENTIONS ARE EFFECTIVE IN REDUCING MORBIDITY OF CHILDREN WITH ASTHMA FROM LOW INCOME FAMILIES

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OBJECTIVES: To analyze the effectiveness of a multicomponent home-based environmental asthma intervention targeting children from low income families in East Harlem, New York City. **METHODS:** Three hundred eighty children aged 17 years or younger with asthma participated in the study. These children and their families were assessed for baseline characteristics including asthma symptoms and health care utilization experienced by a child; presence of home environmental triggers; and parents' knowledge and skills in managing the child's asthma. Based on baseline characteristics, families that received environmental intervention (n=200) were compared with those that did not (n=18). The main asthma outcomes were rates of emergency department visits (edv), hospitalizations (hsp), asthma symptom days (asd), school days missed (sdm), and work days missed (wdm) due to asthma. Observable variables included age, gender, race, and baseline rates of edv, hsp, asd, sdm, and wdm. The effect of the intervention was measured as the difference in the main asthma outcomes at the baseline and at post-intervention assessment. To reduce the influence of confounding factors we applied propensity score method to estimate effect of the intervention on the main asthma outcomes. **RESULTS:** Baseline main asthma outcomes were: 2.56 (intervention group) and 2.64 (control group) for edv, 0.44 and 0.62 for hsp, 7.35 and 5.86 for asd, 5.38 and 6.96 for sdm, and 6.95 and 3.57 for wdm. The average treatment effect of the intervention was 2.13 for edv, 0.92 for hsp, 2.67 for asd, 1.95 for sdm, and 1.89 for wdm. All estimates, except hospitalizations, were significant. The unmatched outcomes for the same outcomes were 3.36, -0.17, 3.80, 1.66, and 1.48 respectively. **CONCLUSIONS:** The results of the study suggest that low-income families can benefit from the intervention by reducing emergency department visits, asthma symptom days, and missed school and work days.

PRS50

EVALUATION OF ASTHMA-RELATED PHARMACY QUALITY ALLIANCE (PQA) MEASURES IN THE MISSISSIPPI MEDICAID POPULATION

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OBJECTIVES: The National Quality Forum (NQF) has endorsed measures from the Pharmacy Quality Alliance (PQA) for suboptimal asthma control (SAC) and absence of controller therapy (ACT) to measure the quality of care among asthma beneficiaries. The purpose of this study was to evaluate a baseline for the Mississippi Division of Medicaid using the PQA measures. **METHODS:** A retrospective cross-sectional analysis of 2008-2012 Mississippi Medicaid claims was undertaken. Asthma beneficiaries aged 5 - 50 years as of the last day of each measurement year were identified. The inclusion and exclusion criteria were applied according to the PQA measure specifications, with an expanded age inclusion to account for Medicaid's pediatric population. Beneficiaries with at least 3 canisters of short-acting beta agonists within 90 days were identified as those with SAC. Of SAC beneficiaries, those who did not receive controller therapy including inhaled steroids, long-acting beta agonists, and leukotriene inhibitors in the same 90 day period were defined as those with ACT. Costs were compared between ACT and non-ACT beneficiaries for each measurement year. **RESULTS:** A total of 62,557 beneficiaries were identified from 2008 to 2012. The percentage of asthma beneficiaries having SAC along with ACT decreased from 8.08% (2008) to 5.15% (2012). Beneficiaries with ACT (compared to non-ACT beneficiaries) had significantly higher asthma-related total costs [$1,516.98 vs. $593.66 (2008); $1,571.98 versus $648.78 (2009); $1,586.06 versus $664.36 (2010); $1,748.73 versus $722.36 (2011); $1,750.64 versus $709.63 (2012)]. Cost differences between the two groups for all the years was significant (p<0.01). **CONCLUSIONS:** This study of an expanded SAC/ACT measure in a Medicaid population found that the proportion of ACT beneficiaries has consistently decreased since 2008; providing a baseline measure for future interventions. Since beneficiaries with ACT have higher costs than non-ACT beneficiaries, further decline in the numbers for this population is needed in the coming years.

PRS51

SMOKING IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PATIENTS: SOCIO-DEMOGRAPHIC FACTORS ASSOCIATED WITH SMOKING CESSATION

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OBJECTIVES: Smoking is one of the major risk factors in chronic obstructive pulmonary disease (COPD) patients, with 90% of deaths from COPD being attributable to smoking. According to the Centers for Disease Control and Prevention (CDC), smoking cessation reduces the risk of developing COPD. Still, little is known about the use of smoking cessation agents and the factors that affect their use among patients. The purpose of the study is to identify the socio-demographic factors that affect the use of these agents among COPD patients. **METHODS:** A retrospective study was done to identify smokers having COPD (ICD9:490-496) and those who use smoking cessation agents from 2006-2010 using Medical Expenditure Panel Survey (MEPS) data. A multiple logistic regression model was built to identify significant socio- demographic predictors associated with the use of smoking cessation agents. **RESULTS:** Out of 2218 smokers with COPD, 176 reported use of smoking cessation agents during the 5 year period. Logistic regression showed African Americans were less likely to use smoking cessation agents than Caucasians (OR=0.379, 95% CI 0.208-0.688), patients having public insurance were more likely to report use of these agents than other insurances (OR=2.619, 95% CI 1.265-5.422), and patients with higher educational levels (OR=1.127, 95% CI 1.043-1.217) were more likely to use these agents. **CONCLUSIONS:** Results showed that a large number of patients continued to smoke even after the diagnosis of COPD whereas; only 176 patients (8%) used smoking cessation agents. Race, educational level, and insurance status were significant predictors of smoking cessation agents' use. Further research needs to be done to evaluate reasons for minimal use of these agents in COPD patients. Results showed inconsistent use of these agents among different population groups; hence there is a requirement for need based smoking cessation programs.

PRS52

DEMOGRAPHIC CHARACTERISTICS OF ASTHMA SUBJECTS THAT STEP-DOWN FROM FLUTICASONE PROPIONATE-SALMETEROL COMBINATION THERAPY

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OBJECTIVES: To compare baseline demographics of long-acting beta-agonist (LABA) step down in asthma patients taking fluticasone propionate-salmeterol via Diskus (FSC). **METHODS:** A retrospective observational study using pharmacy and medical claims data (Market Scan Commercial Database, January 1, 2006 to December 31, 2010). Subjects were included if they had : 1) ≥ 2 FSC prescription claims prior to the index (step-down) date; 2) ≥ 1 asthma claim [ICD-9-CM] codes 493.xx); 3) 12-64 years of age; and 4) continuously eligible for 12 months pre and post index. Subjects were excluded if they had: 1) COPD diagnosis (ICD-9 codes 491.xx, 492, xx, 496.xx), or 2) ≥ 1 prescription claim for anti-cholinergics or 3) receipt of higher dose FSC or another asthma controller other than FSC or ICS after the index. Step-down was defined as reduction in dose of FSC (lower dose FSC) or moving to ICS only without the LABA (ICS monotherapy). These two cohorts were matched 1:3 with subjects that remained on the starting FSC dose